Antibiotic Sensitivity-Restoring and Photosensitive Agents

Challenge
Due to heavy use of antibiotics, drug-resistant bacteria have emerged and led to a drastic decrease in antibiotic effectiveness. WHO projects that by year 2050, 10 million people will die every year world-wide from drug-resistant bacterial infections.

Solution
The invention discloses a novel class of compounds which restore the efficacy of seven (7) separate classes of clinically-used antibiotics in drug-resistant, Gram-negative, and Gram-positive bacteria. A subset of these antibiotic-potentiating compounds is light-activated; this increases the bacteria-killing efficacy by two orders of magnitude. Finally, the photoactivatable compounds work alone against multi-drug-resistant cancers.

Benefits and Features
- Used to overcome drug-resistant bacterial infections
- Eradicates light-accessible cancer cells

Market Potential / Applications
This invention has applications in the healthcare industry and within the pharmaceutical industry.

Developments and Licensing Status
Status: Available
Commercial sponsor sought? Yes

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